Utah Pollutant Discharge Elimination System Storm Water Program
Small MS4 Report Form

The purpose of this report is to contribute information to an evaluation of the UPDES small municipal separate storm sewer system (MS4) permit program. Consistent with 40 CFR §122.37 the Utah Department of Environmental Quality is assessing the status of the storm water program. A "no" answer to a question does not necessarily mean noncompliance with your permit or with the federal regulations. In order to establish the range of variability in the program it is necessary to ask questions along a fairly broad performance continuum.

1. MS4 Information

AMERICAN FORK CITY

Name of MS4

JAMES | HADFIELD | MAYOR

Name of Contact Person (First) (Last) (Title)

(801) 763-3000 | Mayor@afcity.net

Telephone (including area code) Email

51 East Main Street

Mailing Address

American Fork | UT | 84003

City State ZIP code

What size population does your MS4 serve? 26,300

UPDES number UTR090015

What is the reporting period for this report? (mm/dd/yyyy) From 07/01/2011 to 06/30/2012

2. Water Quality Priorities

A. Does your MS4 discharge to waters listed as impaired on a state 303(d) list? ☐ Yes ☑ No

B. If yes, identify each impaired water, the impairment, whether a TMDL has been approved by EPA for each, and whether the TMDL assigns a wasteload allocation to your MS4. Use a new line for each impairment, and attach additional pages as necessary.

Impaired Water	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No

C. What specific sources contributing to the impairment(s) are you targeting in your storm water program?

We are collecting water samples at the outfalls and monitoring the pH and BOD5 levels.

D. Do you discharge to any high-quality waters (e.g., Tier 2, Tier 3, outstanding natural resource waters, or other state or federal designation)? ☑ Yes ☐ No

E. Are you implementing additional specific provisions to ensure their continued integrity? ☑ Yes ☐ No

3. Public Education and Public Participation

A. Is your public education program targeting specific pollutants and sources of those pollutants? ☑ Yes ☐ No

B. If yes, what are the specific sources and/or pollutants addressed by your public education program?

Construction sites and industrial activities. Sedimentation, concrete (pH), and oil/ antifreeze

C. Note specific successful outcome(s) (e.g., quantified reduction in fertilizer use; NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period.

Sediment and hydrocarbon quantities reduction; pH level below 9; monitoring BOD5 levels

D. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your storm water program? ☑ Yes ☐ No

E. Do you belong to a storm water coalition or other advisory committee? If yes, describe: ☑ Yes ☐ No

Utah County Storm Water Coalition

4. Construction

A. Do you have an ordinance or other regulatory mechanism stipulating:

Erosion and sediment control requirements? ☑ Yes ☐ No

Other construction waste control requirements? ☑ Yes ☐ No

Requirement to submit construction plans for review? ☑ Yes ☐ No

MS4 enforcement authority? ☑ Yes ☐ No

B. Do you have written procedures for:

Reviewing construction plans? ☑ Yes ☐ No

Performing inspections? ☑ Yes ☐ No

Responding to violations? ☑ Yes ☐ No

C. What is the threshold for construction storm water plan review (e.g., all projects, projects disturbing greater than one acre, etc.)? All the projects are subject to a SWPPP plan review.

D. Identify the number of active construction sites ≥ 1 acre in operation in your jurisdiction at any time during the reporting period. 23

E. How many of the sites identified in 4.D did you inspect during this reporting period? 23

F. Identify the number of active construction sites < 1 acre in operation in your jurisdiction at any time during the reporting period. 9

G. How many of the sites identified in 4.F did you inspect during this reporting period? 9

H. Describe, on average, the frequency with which your program conducts construction site inspections.

Once a month. Twice a month during grading or when a Corrective Action Notice is issue.

I. Do you prioritize certain construction sites for more frequent inspections? ☑ Yes ☐ No

If Yes, based on what criteria? Projects doing grading are a higher priority and are inspected twice

J. Identify which of the following types of enforcement actions you used during the reporting period for construction activities, indicate the number of actions, or note those for which you do not have authority:

☑ Yes	Notice of violation	# 1	No Authority ☐	
☑ Yes	Administrative fines	# 0	No Authority ☐	
☑ Yes	Stop Work Orders	# 0	No Authority ☐	
☑ Yes	Civil penalties	# 0	No Authority ☐	
☑ Yes	Criminal actions	# 0	No Authority ☐	
☑ Yes	Administrative orders	# 0	No Authority ☐	
☑ Yes	Other Corrective Action Notices		# 44	

K. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions of active construction sites in your jurisdiction? ☑ Yes ☐ No

L. What are the 3 most common types of violations documented during this reporting period?
No SWPPP board on site; No inspection records on-site; Failure to maintain BMPs

M. How often do municipal employees receive training on the construction program? 4 classes during 2012

5. Illicit Discharge Elimination

A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☑ Yes ☐ No

B. Have you completed a map of all storm drain pipes and other conveyances in the storm sewer system? ☑ Yes ☐ No

C. Identify the number of outfalls in your storm sewer system. 65

D. Identify the number of Class V injection wells in your jurisdiction. 358

E. Do you have documented procedures, including frequency, for screening outfalls? ☑ Yes ☐ No

F. Of the outfalls identified in 5.C, how many were screened for dry weather discharges during this reporting period?
17

G. Of the outfalls identified in 5.C, how many have been screened for dry weather discharges at any time since you obtained MS4 permit coverage? 17

H. What is your frequency for screening outfalls for illicit discharges? Describe any variation based on size/type.
20% of them per year. Outfall near the PW Complex are inspected once a year, every year.

I. Do you have an ordinance or other regulatory mechanism that effectively prohibits illicit discharges? ☑ Yes ☐ No

J. Do you have documented procedures for tracing and removing an illegal discharge? ☑ Yes ☐ No

K. Do you have an ordinance or other regulatory mechanism that provides authority for you to take enforcement action and/or recover costs for addressing illicit discharges? ☑ Yes ☐ No

L. During this reporting period, how many illicit discharges/illegal connections have you discovered? 20

M. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated?
20

N. Identify which of the following types of enforcement actions you used during the reporting period for illicit discharges, indicate the number of actions, or note those for which you do not have authority:

☑ Yes	Notice of violation	# 1	No Authority ☐
☑ Yes	Administrative fines	# 0	No Authority ☐
☑ Yes	Stop Work Orders	# 0	No Authority ☐
☑ Yes	Civil penalties	# 0	No Authority ☐
☑ Yes	Criminal actions	# 0	No Authority ☐
☑ Yes	Administrative orders	# 0	No Authority ☐
☑ Yes	Other Corrective Action Notice	# 19	

O. How often do municipal employees receive training on the illicit discharge program? Once a year

6. Storm Water Management for Municipal Operations

A. Have storm water pollution prevention plans (or an equivalent plan) been developed for:

All public parks, ball fields, other recreational facilities and other open spaces	☑ Yes	☐ No
All municipal construction activities, including those disturbing less than 1 acre	☑ Yes	☐ No
All municipal turf grass/landscape management activities	☑ Yes	☐ No
All municipal vehicle fueling, operation and maintenance activities	☑ Yes	☐ No
All municipal maintenance yards	☑ Yes	☐ No
All municipal waste handling and disposal areas	☑ Yes	☐ No

Other N/A

B. Are storm water inspections conducted at these facilities? ☑ Yes ☐ No

C. If Yes, at what frequency are inspections conducted? Every three months

D. List activities for which operating procedures or management practices specific to storm water management have been developed (e.g., road repairs, catch basin cleaning).

Road repairs and maintenance; Underground utilities repair and maintenance, Inspections of projects

E. Do you prioritize certain municipal activities and/or facilities for more frequent inspection? ☑ Yes ☐ No

F. If Yes, which activities and/or facilities receive most frequent inspections? Public Works Complex

G. How are you disposing of catch basin decant water and solid material?

Polluted materials are disposed at the North Point Landfill Plant located at 2000 W 200 S, Lindon, UT

H. Are municipal vehicles washed into an approved wastewater disposal system? ☑ Yes ☐ No

I. Do all municipal employees and contractors overseeing planning and implementation of storm water-related activities receive comprehensive training on storm water management? ☑ Yes ☐ No

J. If yes, do you also provide regular updates and refreshers? ☑ Yes ☐ No

K. If so, how frequently and/or under what circumstances? In-house training once a year and at Conferences

7. Long-term (Post-Construction) Storm Water Measures

A. Do you have an ordinance or other regulatory mechanism to require:

Site plan reviews for storm water/water quality of all new and re-development projects?	☑ Yes	☐ No
Long-term operation and maintenance of storm water management controls?	☑ Yes	☐ No
Retrofitting to incorporate long-term storm water management controls?	☑ Yes	☐ No

B. If you have retrofit requirements, what are the circumstances/criteria?

All existing site plans requesting an amendment are subject to a SWPPP retrofitting requirement.

C. What are your criteria for determining which new/re-development storm water plans you will review (e.g., all projects, projects disturbing greater than one acre, etc.) All projects are reviewed for SWPPP compliance.

D. Do you require water quality or quantity design standards or performance standards, either directly or by reference to a state or other standard, be met for new development and re-development? ☑ Yes ☐ No

E. Do these performance or design standards require that pre-development hydrology be met for:

Flow volumes	☑ Yes	☐ No
Peak discharge rates	☑ Yes	☐ No
Discharge frequency	☑ Yes	☐ No
Flow duration	☑ Yes	☐ No

F. Please provide the URL/reference where all post-construction storm water management standards can be found.
http://afcity.org/Departments/UtilityDepartment/StormWater/tabid/337/Default.aspx

G. How many development and redevelopment project plans were reviewed during the reporting period to assess impacts to water quality and receiving stream protection? 19

H. How many of the plans identified in 7.G were approved? 19

I. How many privately owned permanent storm water management practices/facilities were inspected during the reporting period? 2

J. How many of the practices/facilities identified in I were found to have inadequate maintenance? 2

K. How long do you give operators to remedy any operation and maintenance deficiencies identified during inspections?
If Hazardous spills are present: immediatelly; Otherwise, from 24 hours to 7 days

L. Do you have authority to take enforcement action for failure to properly operate and maintain storm water practices/facilities? ☑ Yes ☐ No

M. How many formal enforcement actions (i.e., more than a verbal or written warning) were taken for failure to adequately operate and/or maintain storm water management practices? 1

N. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? ☑ Yes ☐ No

O. Do all municipal departments and/or staff (as relevant) have access to this tracking system? ☑ Yes ☐ No

P. How often do municipal employees receive training on the post-construction program? Once a year

8. Program Resources

A. What was the annual expenditure to implement MS4 permit requirements this reporting period? $ 576,900.00

B. What is next year's budget for implementing the requirements of your MS4 NPDES permit? $ 860,000.00

C. This year what is/are your source(s) of funding for the storm water program, and annual revenue (amount or percentage) derived from each?

Source: Storm Drain Fee — Amount $ 830,500 OR % 96

Source: Storm Drain Late Fee — Amount $ 30,200 OR % 4

Source: — Amount $ — OR % —

D. How many FTEs does your municipality devote to the storm water program (specifically for implementing the storm water program; not municipal employees with other primary responsibilities)? 1

E. Do you share program implementation responsibilities with any other entities? ☑ Yes ☐ No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
Utah County PW	Public Education to Elementary School students	Supervise that the classes are offered to students
Utah County PW	SWPPP Training to contractors	Attend the class. Invite local contractors

9. Evaluating/Measuring Progress

A. What indicators do you use to evaluate the overall effectiveness of your storm water management program, how long have you been tracking them, and at what frequency? These are not measurable goals for individual management practices or tasks, but large-scale or long-term metrics for the overall program, such as macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
Water sampling results vs stream water quality	2010	Quarterly	2
Water sample ph level at oil/ water separator	2011	Quarterly	4
Water sample BOD5 at oil/ water separator	2011	Quarterly	4

B. What environmental quality trends have you documented over the duration of your storm water program? Reports or summaries can be attached electronically, or provide the URL to where they may be found on the Web.

Public Education and Outreach: Training classes have been offered to staff members, legislators, contractors, developers, consultants and members of the coalition. Based on comments from attendees, there is a need for learning about the new regulations and examples of how to comply with these rules. The attendance to a pre-construction training meeting became mandatory.

Public Involvement and Participation: The creation of a Storm Water Advisory Committe has helped to coordinate the implementation of the program without creating a hardship to contractors and local business owners. The Storm Water Advisory Committee submitted a recommendation to the American Fork City Council for the implementation of an Illicit Discharge Detection and Elimination Program, SWPPP inspection fees and SWPPP bond unit prices.

Illicit Discharge Detection and Detection: The Storm Water Division submitted an IDDE Program for the City Council for review and approval. The IDDE includes a list of High Hazard potential polluters with a detailed three year implementation plan which includes the type of pollutants targeted for each private business inspection.
The Storm Drain Division added a website link for reporting illicit discharges and the number of cases increased dramatically. Finally, more water sampling during dry and wet weather conditions are anticipated for the upcoming year with a monitoring program focused on pH and BOD5 (nutrients) level.

Construction Site Storm Water Runoff Control: Those contractors who attended a pre-construction meeting and were trained about compliance with the SWPPP rules and regulations, performed better than those who did not attend. The monthly inspections have been scheduled 48 hours before a rain event as predicted by the previous' year hydrograph. This approach ensures that during a rain event, most of the roads, parking lots, gutters, etc. are properly maintained and consequently reduces the level of pollution.
The Storm Drain Division is using the latest smart technology to conduct inspection via Android Tablets and forms being sent to the site operators via email.

Post Construction Storm Water Management: The biggest challenge has been verifying the right of entry for inspecting an existing development. The implementation of a Storm Drain Maintenance Agreement, which started being required this year, will solve this problem. From the 19 sites approved for construction, only a few submitted a signed SWM Agreement. The adoption of a Performance Guarantee Bond will include the bonding for the SWM Agreement and consequently an inspection before the final bond release is granted.

Pollution Prevention and Good Housekeeping for Municipal Operations: By implementing quarterly inspections and maintenance of the storm drain inlets and pipe system, the water quality (based on a visual inspection) has improved significantly. The data has also identified the inlets and oil/ water separators that required frequent maintenance. Also, the parking lot and concrete gutter sweeping is helping to reduce the amount of sedimentation collected from each catch basin.
Water samples have been collected and show a significant decrease on the level of pollution when compared to previous quarterly samples.
The Salt Dome Storage Building will also be constructed before the Winter 2012. The site selected for the construction of the Salt Dome will also serve to stockpile the street sweeping and storm drainage maintenance waste before being transported to the Landfill for its proper disposal.

10. Additional Information

In the space below, please include any additional information on the performance of your MS4 program. If providing clarification to any of the questions on this form, please provide the question number (e.g., 2C) in your response.

2. Water Quality Priorities

The American Fork River, Mitchell Hollow, Ellery Sager Slough, Mill Pond and Spring Creek are rivers and streams are not officially listed as Impaired Waters of the United States or the State, but the Storm Drain Division is taking a proactive approach to minimize the pollution levels by monitoring the the levels of pH, detergent, BOD5, and temperature.

3. Public Education and Public Participation

Three EPA videos have been uploaded to the American Fork City's website. The number of viewers is increasing to 600 adults and 2,400 children.

4. Construction

After a full year of collecting data and recording contractor's behavior regarding compliance with the SWPPP and SWMP, the Storm Drain Division concluded that a pre-construction meeting is the best way to reduce pollution, improve compliance and reduce the need for Corrective Actions.

Also, smart inspection scheduling has a positive impact on cleaning storm drain runoff. Based on the previous' year rainfall data frequency and intensity hydrograph, the city inspector is scheduling inspection to construction sites within 48 or 24 hours of a "previous year rain event". This is one of the most efficient ways to make sure the streets, concrete gutters, etc are cleaned before and during a storm event. This approach has shown a positive impact reducing sedimentation loads draining into the storm drain system. The Storm Drain Division is planning to continue the use of this BMP.

5. Illicit Discharge Detection Elimination:

The city has added a Hotline Number for the public to report IDDEs. Considering the fact that people prefer to use a smart phone or emails to report an illegal activity, the city added a web-based computer program to report IDDE from one those devices.

6. Storm Water Management for Municipal Operations:

The construction of the Salt Storage Building has been scheduled for October 2012. The parcel and funding have been secured and the proper approvals have been obtained from the Planning Commission and City Council.
The same site will be used as a street sweeping and storm drain maintenance waste stockpile area during Spring, Summer and Fall. The goal is to decant the polluted fluids at the site before disposing the sludge at the Landfill facility. Currently, the fluids are removed from the maintenance truck and drained into the sanitary sewer system. The remaining solids are disposed at the landfill facility located at the North Point Landfill at 2000 West 200 South, Lindon, UT.

7. Post Construction Storm Water Measures

The city is now requiring the recordation of a Storm Drain Maintenance Agreement for new private development. This new form will allow city staff to obtain legal access to the private property, the right to demand inspections and maintenance records, and the potential collection of maintenance costs in case the cleaning of the storm drain is performed by city staff.

The Storm Drain Division, with the consent of the Advisory Committe, has submitted a Performance Guarantee Bond unit price schedule to be reviewed and approved by the City Council. The goal is to collect a bond for the SWM Agreement and release the funds after a final inspection is completed and the SWM Agreement has been recorded at the Utah County Recorder's Office.

Certification Statement and Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. ☑ Yes

James H. Hadfield, Mayor

Name of Certifying Official, Title

Date (mm/dd/yyyy)